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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,183	03/22/2001	Teiji Yamamoto	010416	2817

23850 7590 04/02/2003

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EXAMINER

BRITTAINE, JAMES R

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 04/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/814,183	YAMAMOTO ET AL.	
	Examiner	Art Unit	[Initials]
	James R. Brittain	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 January 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-5 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-5 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 11) The proposed drawing correction filed on 13 January 2003 is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claim 3 is withdrawn in view of further review of the reference(s) to Everts (US 5076149). Rejections based on the new interpretation follow.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on March 16, 2001. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the reference numerals should be in parentheses. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: The numerous references to claims 1-3 on pages 3-6 should be deleted and the subject matter amended into the Summary of the Invention because the claims can change on

amendment along with the numbering, for example there may be fewer than three claims on allowance, and reference to claims 1-3 is confusing. The reference numeral "69" (page 2, line 8) appears to be incorrect and --59-- is suggested.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2001-10552 in view of Everts (US 5076149).

JP2001-10552 (figures 1-7) teaches caterpillar track structure including links 4, 5, a pin 8 inserted into a pin inserting bore provided on the link with a circumferential groove on an end portion of pin 8, the peripheral rim of an opening of the pin inserting bore and the peripherally extending concave groove together from an annular space as shown in figures 4-7 for receiving snap ring 17. There is no clear disclosure of differential hardening of the pin with the hardness of the pin at a bottom surface of the groove defined by material softer than a portion of the pin with which the link is connected. However, Everts (figures 2, 3) teaches that it is conventional to manufacture a pivot pin 18 with the ends annealed relative to the middle of the pin (col. 4, lines 6-65) so as to more easily secure the pin in place by staking the ends. This reference provides a clear suggestion that it is easier to secure a hardened pin in place

by annealing the ends of the pin so that at its portion of securement it is softer and therefore easier to secure in position than at a central portion that remains desirably hard so as to better withstand the forces applied to it. It would have been obvious to modify the pin of JP2001-10552 so that the ends are annealed and softer than the middle section in view of Everts teaching that it is conventional to manufacture a pivot pin 18 with the ends annealed relative to the middle of the pin (col. 4, lines 6-65) so as to more easily secure the pin in place. As to claims 3-5, these claims recite the hardness of the link engaging portion ranging from 50 to 65 HRC and/or the hardness of the bottom surface of the peripherally extending concave groove ranging from 30 to 45 HRC. These ranges are obvious given the overlapping range suggested by Everts for a pivot pin as being desirably between 59-64 for the pin (col. 4, lines 6-9, claim 5 of Everts) and at the securing ends having a hardness between 30-39 (claim 5 of Everts). These ranges fall completely within applicant's ranges and render obvious the hardness levels applicant claims.

Response to Arguments

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Everts clearly

describes a pivot pin with Rockwell hardness levels in the middle section ranging from about 59 to about 64 and hardness levels in the deformable end sections ranging from about 30 to about 39. The softening of the ends is desirable so as to make securement easier. The ranges disclosed by Everts fall within applicant's claimed ranges and provide strong evidence suggesting the subject matter of applicant's claims. A *prima facie* case has been established.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent of Miyaura (US 6422667) is pertinent.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is 703-308-2222. The examiner can normally be reached on Monday - Friday from 5:30 to 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



James R. Brittain
Primary Examiner
Art Unit 3677

JRB
March 28, 2003